

Notice of Allowability	Application No.	Applicant(s)	
	09/682,040	CHANDRASEKAR ET AL.	
	Examiner	Art Unit	
	Sana Al-Hashemi	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/20/05.
2. ☒ The allowed claim(s) is/are 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

C. Rones

**CHARLES RONES
SUPERVISORY PATENT EXAMINER**

DETAILED ACTION

1. Claims 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13 are allowed. Claims 4, 6-7, 9, 12-13, 15-27, 31-33 are canceled.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/2/2003 has been entered.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. Authorization for this examiner's amendment was given in a telephone interview with Kenneth R. Eiferman on December 14, 2005.

Please cancel claims 18-27, 31-33.

5. Please replace claims 1-35 with the following:

1. (currently amended) A method implemented at least in part by a computer for refining a user query, the method comprising:

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grouping a plurality of terms into a search concept, the search concept being a category that represents a clustering of the terms;

examining a query log to determine to a number of times that each of the terms appears in the query log; and

calculating a relative popularity for the search concept by adding the number of times that each of the terms appears in the query log;

receiving a query from a user; and

mapping the user query to the search concept.

2. (previously presented) The method of claim 1, further comprising initiating, upon the user's request, a preferred query associated with the search concept to provide improved search results.

3. (previously presented) The method of claim 35, wherein the one or more search concepts are popular search concepts and wherein their relative popularity can be used to order the displayed list.

4. canceled.

5. (previously presented) The method of claim 2, wherein initiating the preferred search query comprises selecting one of the terms associated with the concept that has appeared a greatest number of times within the query log.

6-7. canceled.

8. (original) The method of claim 1, wherein the method is performed by execution of instructions stored on a computer-readable medium.

9. canceled

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10. (previously presented) The method of claim 34, further comprising automatically initiating a preferred query associated with at least one of the one or more search concepts to provide a set of improved search results.

11. (previously presented) The method of claim 10, wherein the set of improved search results comprises one or more sub-sets of the set of improved search results, each sub-set associated with one of the search concepts and having a number of search results proportional to the relative popularity of the search concept.

12-13. canceled.

14. (previously presented) The method of claim 10, wherein automatically initiating the preferred search query comprises selecting, for each of the one or more search concepts associated with the preferred query, one of the terms associated with the concept that has appeared a greatest number of times within the query log.

15-27 canceled.

28. (previously presented) A system comprising:
a search concept that is a category which represents a clustering of a plurality of terms;
and

a server communicatively coupled with a client at which a user generates a query, wherein the server groups the terms into the search concept, examines a query log to determine a number of times that each of the terms appears in the query log, calculates a relative popularity for the search concept by adding the number of times that each of the terms appears in the query log, and maps the user query to the search concept.

29. (previously presented) The system of claim 28, wherein the server is a search engine and the client is a web browser.

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30. (previously presented) The system of claim 28, wherein the server and the client are applications.

31-33 canceled.

34. (previously presented) The method of claim 1, comprising mapping the user query to one or more search concepts.

35. (previously presented) The method of claim 34, further comprising displaying a list of the one or more search concepts.

Allowable Subject Matter

6. The following is an examiner's statement of reasons for allowance: the 37 CFR 1.131 was persuasive. Claims 1-3, 5, 8, 10-11, 14, 28-30, 34-35, as renumbered 1-13 are allowed.

Regarding independent claims 1, and 28, the prior art of record fails to disclose or suggest the claimed provision of: grouping a plurality of terms into a search concept, the search concept being a category that represents a clustering of the terms, examining a query log to determine to a number of times that each of the terms appears in the query log and calculating a relative popularity for the search concept by adding the number of times that each of the terms appears in the query log, in conjunction with remaining claim provisions, is not taught or suggested, or rendered obvious over the prior art of record or that encountered in searching the invention.

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7. The dependent claims 2-3, 5, 8, 10-11, 29-30, 34-35, being further limiting to the independent claims, definite and enabled by the Specification are also allowed.

Comments

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

As allowable subject matter has been indicated, Applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP section 707.07(a).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is 571-272-4013. The examiner can normally be reached on 8Am-4:30Pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sana Al-Hashemi
Patent Examiner
Technology Center 2100
December 14, 2005


CHARLES RONES
SUPERVISORY PATENT EXAMINER